

## P/ NT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
US Department of Commerce  
United States Patent and Trademark  
Office, PCT  
2011 South Clark Place Room  
CP2/5C24  
Arlington, VA 22202  
ETATS-UNIS D'AMERIQUE  
in its capacity as elected Office

Date of mailing: 01 March 2001 (01.03.01)	
International application No.: PCT/US00/23189	Applicant's or agent's file reference: 7808/JB
International filing date: 23 August 2000 (23.08.00)	Priority date: 24 August 1999 (24.08.99)
Applicant: FRANCE, Paul, Amaat et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International preliminary Examining Authority on:  
13 November 2000 (13.11.00)

☐ in a notice effecting later election filed with the International Bureau on:

2. The election ☒ was

☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland Facsimile No.: (41-22) 740.14.35	Authorized officer:  J. Zahra Telephone No.: (41-22) 338.83.38
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# PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>7808/JB</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/US 00/ 23189</b>	International filing date (day/month/year) <b>23/08/2000</b>	(Earliest) Priority Date (day/month/year) <b>24/08/1999</b>
Applicant <b>THE PROCTER &amp; GAMBLE COMPANY et al.</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 2 sheets.  
☒ It is also accompanied by a copy of each prior art document cited in this report.

### 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :

☐ contained in the international application in written form.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority in written form.

☐ furnished subsequently to this Authority in computer readable form.

☐ the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

☐ the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ **Certain claims were found unsearchable** (See Box I).

3. ☐ **Unity of invention is lacking** (see Box II).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No. \_\_\_\_\_

☐ as suggested by the applicant.

☐ because the applicant failed to suggest a figure.

☐ because this figure better characterizes the invention.

☐ None of the figures.

# INTERNATIONAL SEARCH REPORT

International Application No

PC17/US 00/23189

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 D06M10/10 D06M14/18 A61F13/15

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 D06M A61F C08J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

WPI Data, PAJ, EPO-Internal

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5 403 626 A (KIM YOUNG H ET AL) 4 April 1995 (1995-04-04) claim 1 ---	1
A	WO 98 10726 A (PROCTER & GAMBLE) 19 March 1998 (1998-03-19) claim 1 ---	1
A	WO 99 30658 A (GRAY BRIAN FRANCIS ;PROCTER & GAMBLE (US)) 24 June 1999 (1999-06-24) claim 1 ---	1
P, A	WO 00 16913 A (PROCTER & GAMBLE) 30 March 2000 (2000-03-30) cited in the application claim 1 -----	1

☐ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

° Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*G\* document member of the same patent family

Date of the actual completion of the international search

15 December 2000

Date of mailing of the international search report

27/12/2000

Name and mailing address of the ISA

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Authorized officer

Niaounakis, M

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US 00/23189

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 5403626	A	04-04-1995	KR 9304611 B	01-06-1993
			KR 9310566 B	28-10-1993
			DK 164491 A	28-03-1992
			FR 2667320 A	03-04-1992
			FR 2702681 A	23-09-1994
			NL 9101626 A	16-04-1992
			RU 2070211 C	10-12-1996
			US 5275663 A	04-01-1994
WO 9810726	A	19-03-1998	US 5792412 A	11-08-1998
			AU 4264397 A	02-04-1998
			EP 0929280 A	21-07-1999
			US 5834092 A	10-11-1998
			US 5879782 A	09-03-1999
WO 9930658	A	24-06-1999	AU 5527898 A	05-07-1999
			EP 1047364 A	02-11-2000
WO 0016913	A	30-03-2000	AU 6051199 A	10-04-2000

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



Applicant's or agent's file reference 7808/JB	<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US00/23189	International filing date (day/month/year) 23/08/2000	Priority date (day/month/year) 24/08/1999
International Patent Classification (IPC) or national classification and IPC D06M10/10		
Applicant THE PROCTER & GAMBLE COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 6 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☒ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  13/11/2000	Date of completion of this report  22.11.2001
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Koegler-Hoffmann, S  Telephone No. +49 89 2399 8611  

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/US00/23189

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-19 as originally filed

**Claims, No.:**

1-40 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/US00/23189

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes:	Claims	1-40
	No:	Claims	
Inventive step (IS)	Yes:	Claims	5-9, 14-18, 24, 27-29
	No:	Claims	1-4, 10 -13, 19-23, 25, 26, 30
Industrial applicability (IA)	Yes:	Claims	1-40
	No:	Claims	

2. Citations and explanations  
**see separate sheet**

## VI. Certain documents cited

1. Certain published documents (Rule 70.10)

and / or

2. Non-written disclosures (Rule 70.9)

**see separate sheet**

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**Re Item V**

**Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

In view of the arguments mentioned under Re item VIII the subject matter of claim 1 (12) is directed to a liquid pervious web which comprises i) an apertured web selected from the group of polymeric films and nonwovens and ii) a substantially hydrophilic coating, less than about 10  $\mu\text{m}$  thick, on at least one surface of the web.

Both of the documents D1 (US-A-6 103 952) and D2 (US-A-4 614 679) disclose an apertured web comprising a hydrophilic coating (see D1: column 7, line 63 to column 8, line 18; D2: column 21, line 67 to column 22, line 27).

The subject-matter of claims 1 and 12 differs therefrom only in that the thickness of the coating is not explicitly mentioned in D1 or D2.

According to the description of the current application three-dimensional apertured polymeric web are already known in the prior art. Moreover, surface treatments wherein substrates are coated with hydrophilic coatings and wherein the coating is applied to the substrate by a radiation curing process (see, for example D3: US-A-5 403 626) is also already known in the art. D3 describes hydrophilic layer having a thickness of 0.01 to 1  $\mu\text{m}$  (column 4, lines 28 to 30).

Thus, the skilled person wishing to provide a liquid pervious polymeric web having durable wettability would regard it a normal design option to treat the web with a hydrophilic coating to impart good wettability.

The subject matter of claims 1 to 4, 10 to 13, 19 to 23, 25, 26 and 30 does not fulfil the requirements of Article 33(3) PCT.

**Re Item VI**



**Certain documents cited**

With respect to Rule 70.10 PCT, attention is drawn to WO 00/16913 published on 30.03.00, filed on 20.09.99 with a US priority date of 21.09.98 and 24.08.99.

**Re Item VII**

**Certain defects in the international application**

1. The US Patent Application Serial numbers should be changed to the publication numbers.

2. The description of the present application contains the expression "incorporated herein by reference..". Thus, while describing the present invention, reference has been made to the content of another document which content, however, has not been included in the description of the present application. The examiner considers that this reference merely aims at indicating or acknowledging a relevant state of the art according to Rule 5.1(a)(ii) PCT.

Hence, a short comment on the corresponding document appears to sufficient. The comment, however, should be purely factual - Article 34.2(b) PCT.

If it is not necessary to know the content of said documents to carry out the present invention, the expression "..incorporated.." should be cancelled. Should the content or parts of the content of said documents be necessary for carrying out the present invention, the applicant must include in the description of the present application the necessary information taken from said documents, i.e. without contravening the requirements of Article 34.2(b) PCT. The description must contain all the essential features of the invention per se.

3. The units "feet", "inch", "micron" expressed in the description do not meet the requirements of Rule 10.1(a) PCT and should be replaced by the appropriate SI units. The present expressions should, however, be retained in parentheses after the replacement expressions.

**Re Item VIII**

**Certain observations on the international application**

1. The terms "Post Aging", "Pre Aging", "Post Washing" and "Pre Washing" are not clearly defined in claims 1 to 4, 12 and 13 insofar that the measuring methods (time, temperature, kind of liquid, etc) are not mentioned.

Moreover, the subject matter of claims 1 and 12 is not defined by a concrete value range but by an unspecific relation between a not defined starting value (Pre Aging contact angle) and a not defined end value (Post Aging contact angle).

2. The process feature in independent claims 1 and 12 that "said hydrophilic coating is applied to the web by a radiation curing process.." is without any significance for the pervious web per se, since the treatment cannot be deduced from the end-product.

Thus, the subject matter of claims 1 to 4, 12 and 13 is unclear and does not fulfil the requirements of Article 6 PCT.

Furthermore the relation between the Pre Aging contact angle (Pre Washing contact angle) and the Post Aging contact angle (Post Washing contact angle) is not a suitable parameter to define the product claimed, since any product could fall within the scope of said parameter.

Thus, for example, a liquid pervious web having bad wettable characteristics could also have a Post Aging contact angle which is not more than about 60 degrees greater than the Pre Aging contact angle.

Therefore and in view of the fact that the concrete value of the Pre Aging contact angle is not defined, the subject matter of claims 1 to 4, 12 and 13 does not fulfil the requirements of Article 5 PCT (not sufficiently clear to be carried out by a person skilled in the art).

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
1 March 2001 (01.03.2001)

PCT

(10) International Publication Number  
**WO 01/14627 A1**

(51) International Patent Classification<sup>7</sup>: D06M 10/10, 14/18, A61F 13/15

(21) International Application Number: PCT/US00/23189

(22) International Filing Date: 23 August 2000 (23.08.2000)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
60/150,445 24 August 1999 (24.08.1999) US

(71) Applicant (for all designated States except US): THE PROCTER & GAMBLE COMPANY [US/US]; One Procter & Gamble Plaza, Cincinnati, OH 45202 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): FRANCE, Paul, Amaat [BE/US]; 8331 Summerbridge Way, West Chester, OH 45069 (US). RADOMYSELSKI, Arseni V. [RU/US]; 6493 Kirstine Drive, Hamilton, OH 45011 (US). LEE, Yann-Per [—/US]; 6386 Kings Arm Way, Farifield, OH 45014 (US).

(74) Agents: REED, T., David et al.; The Procter & Gamble Company, 5299 Spring Grove Avenue, Cincinnati, OH 45217-1087 (US).

(81) Designated States (*national*): AE, AG, AL, AM, AT, AT (utility model), AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, CZ (utility model), DE, DE (utility model), DK, DK (utility model), DM, DZ, EE, EE (utility model), ES, FI, FI (utility model), GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KR (utility model), KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SK (utility model), SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.

(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

**Published:**

- With international search report.
- Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DURABLY WETTABLE LIQUID PERVIOUS WEBS PREPARED USING A RADIATION CURING PROCESS

(57) Abstract: Disclosed is a durably wettable, liquid pervious web that is particularly suitable as a topsheet for absorbent articles such as baby and adult diapers and feminine hygiene products. The wettable web is derived from a polymeric film or nonwoven to which is applied a thin organic material on at least one surface of the starting web. The thin organic coating is in the form of a polymer and is obtained by radiation-induced curing of a polymerizable compound, preferably a di-functional acrylate.

WO 01/14627 A1